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(81) 指定国 (国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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添付公開書類:
— 国際調査報告書

(54) Title: SCREENING METHOD

(54) 発明の名称: スクリーニング方法

(57) Abstract: It is intended to provide a method of screening a substance for preventing/treating diseases (for example, kidney diseases or diabetes) in which a protein having an amino acid sequence being the same or substantially the same as the amino acid sequence represented by SEQ ID NO:2 or its salt participates, characterized by using the above-described protein, its peptide fragment or its salt, or a polynucleotide encoding a protein having an amino acid sequence being the same or substantially the same as the amino acid sequence represented by SEQ ID NO:2 or its peptide fragment.

(57) 要約: 本発明は、配列番号: 2で表されるアミノ酸配列と同一または実質的に同一のアミノ酸配列を含有する蛋白質もしくはその部分ペプチドまたはその塩、あるいは配列番号: 2で表されるアミノ酸配列と同一または実質的に同一のアミノ酸配列を含有する蛋白質またはその部分ペプチドをコードするポリヌクレオチドを用いることを特徴とする、該蛋白質またはその塩が関連する疾患、例えば、腎疾患または糖尿病の予防・治療物質のスクリーニング方法を提供する。

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP03/14339

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl[7] C12N15/09, C12Q1/02, C12Q1/68, G01N33/15, G01N33/50, G01N33/53, C07K14/47, A61K31/7088, A61K39/395, A61K45/00, A61K48/00, A61P3/10, A61P13/12
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
Int.Cl[7] C12N15/09, C12Q1/02, C12Q1/68, G01N33/15, G01N33/50, G01N33/53, C07K14/47, A61K31/7088, A61K39/395, A61K45/00, A61K48/00, A61P3/10, A61P13/12

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPI(DIALOG), BIOSIS(DIALOG), JSTPlus(JOIS), GenBank/EMBL/DDBJ/GeneSeq, SwissProt/PIR/GeneSeq

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5958690 A (INCYTE PHARM. INC.), 28 September, 1999 (28.09.99), (Family: none)	1-31
Y	Jay P. et al., Cloning of the human homologue of the TGF β-stimulated clone 22 gene., Biochem. Biophys.Res.Commun., 1996, Vol.222, No.3, pages 821 to 826	1-31
Y	SHIBANUMA M., et al., Isolation of a gene encoding a putative leucine zipper structure that is induced by transforming growth factor β1 and other growth factor., J.Biol.Chem., 1992, Vol.267, No.15, pages 10219 to 10224	1-31

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
04 February, 2004 (04.02.04)	17 February, 2004 (17.02.04)
Name and mailing address of the ISA/ Japanese Patent Office	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP03/14339

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	IHARA Y. et al., TGF-β-stimulated clone-22(TSC-22) represses the transcription of insulin gene., Dia betes, 2001, Vol.50, sup2, pA342-A343	1-31
Y	IHARA Y. et al., TSC-22(TGF-beta-stimulated clone-22) represses the transcription of insulin gene, Diabetologia, 2001, Vol.44, sup1, pA120	1-31
A	Rae FK. et al., Novel associaton of a diverse range of genes with renal cell carcinoma as identified by differential display., Int.J. Cancer., 2000, Vol.88, No.5, pages 726 to 732	1-31
P,A	Xu Y. et al., Primary culture model of peroxisome proliferatoractivated receptor gamma activity in prostate cancer cells., J.Cell.Physiol., 2003 July, Vol.196, No.1, pages 131 to 143	1-31
P,A	SUGAWARA F. et al., The role of the TSC-22-(-396) A/G variant in the development of diabetic nephro pathy., Diabetes Research and Clinical Practice, 2003 June, Vol.60, No.3, pages 191 to 197	1-31

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP03/14339

Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. [X] Claims Nos.: 34, 35

because they relate to subject matter not required to be searched by this Authority, namely:

Claims 34 and 35 pertains to methods for treatment of mammals including humans by prevention or therapy and thus relates to a subject matter which this International Searching Authority is not required to search.

2. [X] Claims Nos.: 32, 33, 36, 37

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

Concerning "a TSC-22 inhibitor" as set forth in claims 32, 33, 36 and 37, this inhibitor is a compound obtained by a screening method. However, the description discloses no specific TSC-22 inhibitor obtained by screening. Thus, claims 32, 33, 36 and 37 are neither (continued to extra sheet)

3. [ ] Claims Nos.:

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. [ ] As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. [ ] As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. [ ] As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. [ ] No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

[ ] The additional search fees were accompanied by the applicant's protest.

[ ] No protest accompanied the payment of additional search fees.

Continuation of Box No.I-2 of continuation of first sheet(1)

supported by the description nor disclosed therein. Although the common technical knowledge at the point of the application is considered, it is completely unknown what specific compounds are involved and what are not. Thus, the above claims are described in an extremely unclear manner. Such being the case, no meaningful search can be made on the inventions as et forth in the above claims.